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1. 9422  
V5G85  
Reserve

Effective Date  
July 14, 1943

WAR FOOD ADMINISTRATION  
U.S. FOOD DISTRIBUTION ADMINISTRATION  
WASHINGTON 25, D. C.

TENTATIVE FDA SPECIFICATIONS  
FOR  
GREENS, DEHYDRATED

A. APPLICABLE SPECIFICATIONS.

A-1. There are no other FDA Specifications applicable to this specification.

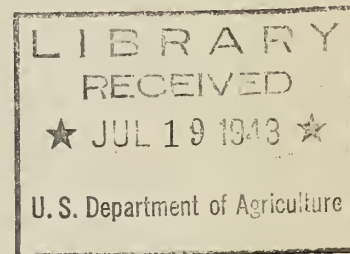
B. KINDS AND STYLES.

B-1. Kinds. Greens, Dehydrated, shall be such of the following as may be specified in the invitation for bids.

Kind I. Spinach  
Kind II. Kale  
Kind III. Chard  
Kind IV. Beet Greens  
Kind V. Mustard Greens  
Kind VI. Turnip Greens

B-2. Styles.

Style I. Cut  
Style II. Ground



C. MATERIAL AND WORKMANSHIP.

C-1. The greens used shall be of typical green color and suitable for dehydration. The dehydrated product shall be prepared under sanitary conditions and in accordance with good commercial practice.

D. GENERAL REQUIREMENTS.

D-1. All deliveries shall conform, in every respect, to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

D-2. The product shall be free from insect infestation.

E. DETAILED REQUIREMENTS.

E-1. Preprocessing.

E-1(a). Greens may be received with their roots attached, or loose in crates with the roots cut off. The greens shall be properly washed. The greens shall then be sorted and trimmed to remove the roots, tough portions of stems, and all damaged and discolored leaves, after which they shall be thoroughly washed in a revolving washer or tanks of clean water to remove the remaining sand and dirt.

Undue bruising of the unblanched leaves will result in large losses of Vitamin C (ascorbic acid). Prolonged storage of spinach, kale, and mustard greens will cause loss of ascorbic acid; a 50 percent reduction in Vitamin C may result from 6 to 24 hours storage, depending upon the conditions of storage. Therefore, greens should be processed as soon as possible after harvest.

Packing crates should not be stacked close together, as this may cause over-heating.

E-1(b). Blanching. The blanching shall be done in flowing steam at not less than 190° F. until midribs are translucent and the catalase system inactivated. The following blanching times are suggested for the various greens: spinach, 2 minutes; chard, 3 to 4 minutes; mustard greens, 2 minutes; kale, 2 minutes; and turnip greens, 3 minutes.

E-1(c). The blanched material should be dehydrated immediately and in no event shall it be held for more than 1/2 hour prior to dehydration.

## E-2 Dehydrating.

E-2(a). The temperature and humidity of the air during dehydration shall be such that the product will not be scorched or otherwise damaged. The finishing temperature shall not exceed 180° F.

E-2(b). The dehydration surface shall be so loaded as to assure proper air circulation. This load will be ordinarily 1 pound or less per square foot.

## E-3. Dehydrated Product.

E-3(a). Color. The dehydrated product shall possess a practically uniform characteristic green color.

E-3(b). Aroma. The dehydrated product shall possess a good, typical aroma, free from hay-like, scorched, musty, or other objectional odors.

E-3(c). Moisture Content. The moisture content of the finished product shall not exceed 4 percent by weight.

E-3(d). Defect Tolerances. The dehydrated product shall not contain more than 2 percent by weight of noticeably defective pieces. A piece shall be considered noticeably defective if it is discolored (scorched, bruised or decayed), or if it shows areas of insect or pathological damage.

E-3(e). Style I, Cut. Not more than 10 percent by weight shall pass through an 8 mesh screen (0.097-inch perforations). Style II, Ground, shall pass through an 8 mesh screen (0.097-inch perforations).



E-4. Rehydrated Product.

E-4(a). Rehydration. Dehydrated greens shall rehydrate in water at 68° F. within thirty minutes.

E-4(b). Color. The rehydrated product shall possess a good, typical green color.

E-4(c). Flavor. The rehydrated product shall possess a good flavor, typical of the kind of greens from which it was prepared.

E-4(d). Texture. The rehydrated product shall possess a fairly tender texture.

F. METHODS OF INSPECTION AND TESTS.

F-1. Inspection shall be made at point of origin, unless otherwise specified.

F-2. The test to show the absence of the catalase system shall be made according to accepted methods.

F-3. Moisture determination shall be made by the vacuum oven method by drying 2 grams of the product at 70° C. for 6 hours in partial vacuum having a pressure of not over 100 mm. mercury.

G. PACKAGING, LABELING, PACKING, AND MARKING FOR SHIPMENT.

G-1. Packaging.

G-1(a). Unless otherwise specified, the dehydrated greens shall be packaged in hermetically sealed containers in which the air has been replaced by nitrogen or carbon dioxide gas.

G-2. Labeling. Unless otherwise specified, the label on each container shall be marked with the kind and style of product, the net weight in pounds, the month and year of dehydration, name and address of packer, location of processing plant, and specific directions for rehydration.

G-3. Packing.

G-3(a). Domestic. Unless otherwise specified, the product shall be delivered in standard commercial containers, so constructed as to insure acceptance by common or other carriers, for safe transportation, at the lowest rate, to the point of delivery.

G-3(b). Export. Unless otherwise specified, the product shall be packed in nailed wood, weatherproof solid fibre of either the VI or V2 Types, or wire-bound wood boxes complying with Export Packaging Specifications FSC 1742-C.

G-4. Marking. Unless otherwise specified, shipping containers shall be marked with the kind and style of product, the net weight of the product, the gross weight of and volume occupied by the container, the date of processing, the name of the contractor, the number of the contract or order, and date of packing. Ink used in marking containers shall take on wood or fibre and shall be water-fast and sun-fast.

JUL 19 1943

